

COURSE DESCRIPTION FORM

Course Code and Title	CE496 GRADUATION PROJECT (SE)		
Semester	8		
Catalog description	This course is intended to carry out research in theoretical, applied and experimental fields of civil engineering including planning of the research, literature survey, solution of practical problems and modelling with tools or software extensively used in civil engineering practice. The course is also includes written and oral presentation of results.		
Required reading	-		
Recommended reading	-		
ECTS	6		
Prerequisites and co-requisites	Student-Supervisor match is done considering the student requests and supervisor's course requisites.		
Compulsory/Elective	Compulsory course		
Language of instruction	English		
Aim of course	The aim of the course is to provide use of the knowledge gained through the civil engineering education on analysis, modelling, and solution of practical civil engineering problems, interpretation of results and designing, and to provide experience in report writing and oral presentation.		
Learning outcomes of the course unit	Ability to review the current literature, Ability to use analytical, experimental and/or computational methods to solve problems and design, Ability of represent the results with a technical report and present the results to a group of audience.		
Mode of delivery	The mode of delivery of this course is face to face.		
Course content	<ol style="list-style-type: none"> 1. Determination of final subject and planning 2. Preliminary work about the subject, review of current literature, data collection, 3. Determination of necessary analytical, experimental or numerical methods and tools 4. Works done by the student with the guidance of supervisor 5. Works done by the student with the guidance of supervisor 6. Works done by the student with the guidance of supervisor 7. Works done by the student with the guidance of supervisor 8. Works done by the student with the guidance of supervisor 9. Works done by the student with the guidance of supervisor 10. Assessment of the results of project 11. Assessment of the results of project 12. Preparation of report and presentation 13. Preparation of report and presentation 14. Preparation of report and presentation 15. Midterm Exam 		
Planned learning activities and teaching methods	6 (2+4) lecture hours per week Research using internet sources and library Designing and applying materials Midterm and midterm studies Final exam and Final exam studies		
Assessment methods and criteria		Quantity	Percentage (%)
	Mid-terms	1	20
	Assignment	-	-
	Exercises	-	-
	Projects	1	80

	Practice	-	-				
	Quiz	-	-				
	Contribution of In-term Studies to Overall Grade %		-				
	Contribution of Final Examination to Overall Grade (%)		100				
	Attendance						
Workload	Work activity	Total Week Count	Weekly Duration (in hour)	Total Workload in Semester			
	Theoretical Study Hours of Course Per Week	14	2	28			
	Practicing Hours of Course Per Week	14	4	56			
	Reading	5	2	10			
	Searching in Internet and Library	5	2	10			
	Designing and Applying Materials	14	2	28			
	Preparing Reports	2	4	8			
	Preparing Presentation	1	4	4			
	Presentation	1	1	1			
	Mid-Term and Studying for Mid-Term	1	2	2			
	Final and Studying for Final	1	0	0			
	Other	0	0	0			
	Total Workload:			147			
	Total Workload / 25:			5,88			
ECTS:			6				
Course's contribution to program	No	Program Learning Outcomes	1	2	3	4	5
	1	Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline; ability to use theoretical and applied knowledge in these areas in complex engineering problems.				X	
	2	Ability to identify, formulate, and solve complex civil engineering problems; ability to select and apply proper analysis and modeling methods for this purpose.					X
	3	Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result; ability to apply modern design methods for this purpose.					X
	4	Ability to devise, select, and use modern techniques and tools needed for analyzing and solving complex problems encountered in civil engineering practice; ability to employ information technologies and to use at least one computer programming language effectively.				X	
	5	Ability to design and conduct experiments, gather data, analyze and interpret results for investigating complex civil engineering problems or discipline specific research questions.				X	
	6	Ability to work efficiently in intra-disciplinary and multi-disciplinary teams.				X	
	7	Ability to work individually.				X	
	8	Ability to communicate effectively in Turkish, both orally and in writing; ability to write effective reports and comprehend written reports.					

	9	Knowledge of English of B1 level according to <u>Common European Framework of Reference</u> .				X	
	10	Prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.				X	
	11	Recognition of the need for lifelong learning; ability to access information, to follow developments in science and technology, and to continue to educate him/herself.				X	
	12	Consciousness to behave according to ethical principles and professional and ethical responsibility.				X	
	13	Knowledge on standards used in civil engineering practice.			X		
	14	Knowledge about business life practices such as project management, risk management, and change management.				X	
	15	Awareness in entrepreneurship, innovation; knowledge about sustainable development.				X	
	16	Knowledge about the global and social effects of engineering practices on health, environment, and safety, and contemporary issues of the century reflected into the field of engineering.				X	
	17	Awareness of the legal consequences of engineering solutions.			X		
Name of lecturer(s) and contact information		All faculty members					